EMB-CPU04
Intel Atom Processor CPU module

INTRODUCTION

The EMB-CPU04 is an Embedded Single Board Computer(SBC) that is complete computers built on a single circuit board. It is a based on Intel system controller hub HS15WPT chipset supporting on-board Intel Atom processor Z520PT processor. It provides 1 SODIMM slot supporting a memory up to 2GB, 1 LVDS, 1 VGA port. This board is the low cost Single Board Computer which equipped a processor of low power and heat. This product provides a suitable solution in an embedded market wanting low power and small size.

FEATURES

◆ Intel Atom Processor Z520PT(Z510PT, Z530P)

◆ Intel system controller hub US15WPT chipset

◆ Intel GMA500 graphics driver (VGA, LVDS)

◆ Single Power(+9V to +15V) operation

◆ Compact small size 160 x 100mm

◆ Supports industrial Temperature range

   (-40 - +85)

APPLICATION

◆ Home Network
◆ Control Equipment
◆ Factory automation
◆ Data acquisition
◆ Medical and robotics
◆ Auto PC UMPC (Ultra Mobile PC)
◆ Instrument control
◆ PC Music player

PHYSICAL DIMENSION
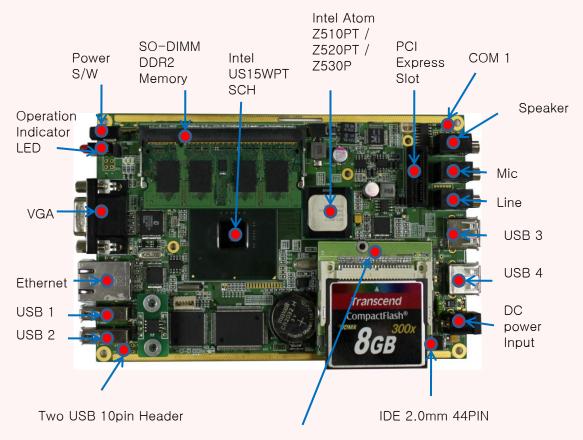
▪ 160mmx100mm Small size

▪ +5V Single power

SOFTWARE

◾ **Operating system**

  ▪ Windows 2000/XP/7

◾ **BIOS**

  ▪ AMI BIOS

H/W SPECIFICATIONS

Form Factor	160 x 100mm
Processor	Intel Atom Z520PT(512K cache, 1.33GHz, 533MHz FSB)
System Chipset	Intel System Controller Hub US15WPT
Bios	AMI bios
Memory	1 x 200 pin DDR2-400/533 SODIMM max up to 2GB
Compact Flash slots	44pin IDE to Compact Flash type-2 adaptor
NVRAMs	
Display	Support LVDS, VGA Dual Display(Max. 1920x1440)
Ethernet	one 10/100/1000 Mbps Ethernet port
EIDE	2mm pitch 44pin EIDE connector
Audio	HD Codec audio with mono speaker AMP
Serial I/O	Two serial ports , one can be used as touch input
USB	Four USB A connector, Two with 10pin header
Status LEDS	Indication for Ready and operation
Power Input	Single +9 to + 15V range power, max current is 1.5A
Operating Temperature	0 to +60(without FAN and Heat-sink), 0 to +70 (with Heat-sink)
Power Consumption	Max 15W

Configuration Map

Power S/W

SO−DIMM DDR2 Memory

Intel US15WPT SCH

Intel Atom Z510PT / Z520PT / Z530P

PCI Express Slot

COM 1

Speaker

Operation Indicator LED

Mic

Line

VGA

USB 3

USB 4

Ethernet

DC power Input

USB 1

USB 2

Two USB 10pin Header

44Pin To CF card Adaptor

IDE 2.0mm 44PIN